

### **REMARKS**

Entry of this response is proper under 37 CFR §1.116, since there are no new claims or new issues presented herein.

Claims 1-37 are all the claims presently pending in the application. There are no claim amendments, but a clean version of the claims is presented herein for reference.

It is noted that the claim amendments, if any, are made only for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Although claims 1-37 nominally stand rejected under 35 U.S.C. § 102(a) as anticipated by Funderburk et al. (“XTABLES: Bridging Relational Technology and XML”), the rejection of record is clearly an obviousness rejection under 35 U.S.C. § 103(a), based on Funderburk, further in view of US Patent 6,618,822 to Loaiza et al.

This rejection respectfully is traversed in the following discussion, wherein Applicants submit that the rejection of record fails to provide a *prima facie* obviousness rejection, since the Examiner’s position is clearly based on a fundamental mistake of definition wherein the Examiner improperly attempts to substitute a description of potential information contents for a “virtual resource” a definition of that terminology.

#### **I. THE CLAIMED INVENTION**

The claimed invention is directed to virtual resources developed independently of actual resources. The virtual resources are customized to a particular audience. The invention includes constructing at least one virtual resource independent of an actual resource, connecting the actual resource to the at least one virtual resource, retrieving the at least one virtual resource, and extracting at least one descriptor from the at least one retrieved virtual resource.

Funderburk et al. discloses a system referred to as “XTABLES.” XTABLES automatically maps the schema and data of an underlying relational database system to a low-level

default XML view.

The claimed invention, on the other hand, provides a virtual resource that is constructed independently of any actual resource.

## II. THE PRIOR ART REJECTION

The Examiner alleges that Funderburk et al., as modified by Loaiza, renders obvious the claimed invention. Applicants again submit, however, that there are elements of the claimed invention which are neither taught nor suggested by Funderburk et al., once the terminology of the claimed invention is properly understood.

As Applicants explained in their previous response, Funderburk et al. discloses XTABLES, a system that automatically maps the schema and data of an underlying relational database system to a low-level default XML view. In contrast, the claimed invention constructs a virtual resource independent of an actual resource.

The Examiner's response on page 3 of the Office Action mailed on December 8, 2008, clearly demonstrates the Examiner's fundamental misunderstanding of the present invention, thereby clearly demonstrating the underlying fundamental flaw of the rejection currently of record.

That is, in this response on page 3, the Examiner points to the description in paragraph [0073] the present application: "*Virtual Resources may contain any or all of the following information, including one virtual name, one actual name, one collection descriptor, one image (icon), one or more domains, zero or more attributes, zero or more methods, zero or more validators, one resource implementor, one description, and one last modified date and time.*"

The Examiner then continues on: "*If the Virtual Resource contains an actual name, then wouldn't the virtual resource be an actual resource? Therefore, a default XML view described in Funderburk may be at least one virtual resource. Thus, the combination of Funderburk and Loaiza teaches constructing at least one virtual resource independent of an actual resource ....*"

In response to the Examiner's clarification, as partially recited above, of his understanding of Funderburk *vis a vis* the present invention, it is respectfully brought to the Examiner's attention that the Examiner's statement above indicates a contortion of the description from the

specification. That is, the Examiner improperly attempts to imply that this sentence defines a Virtual Resource as any entity having any of the listed information. Therefore, in the Examiner's incorrect interpretation, a default XML view containing an actual name becomes a Virtual Resource.

This interpretation is both incorrect and improper, since this sentence is not defining a Virtual Resource, let alone defining the term as implied by the Examiner.

To the Examiner's question "If the Virtual Resource contains an actual name, then wouldn't the resource be an actual resource?", the answer is emphatically "no", as follows.

Using an analogy, this response to the latest Office Action contains the actual name of a resource, for example: actual name = "Relational Database of Daily Trades on the New York Stock Exchange". But that does not make this response an actual resource. That is, this response under 37 CFR §1.116 has not become the "Relational Database of Daily Trades on the New York Stock Exchange".

In similar manner, the fact that a virtual resource may contain the name of an actual resource does not make it one. The present invention's virtual resource sometimes simply refers to an actual resource by name ... or it may not. An actual name is not required, and this is evidence that the present invention's virtual resource is not an actual one whether or not it contains an actual name.

For example, a virtual resource may be "Daily Stock Trades", which may not be linked at all (e.g., no actual name associated) or may be linked to the New York, American, or some relational database.

The distinction in the present invention between "actual resource" and "virtual resource" is perhaps best described four paragraphs in the specification prior to the one cited by the Examiner (e.g., lines 6-8 on page 16 of the specification, as filed), wherein is described: "*Hence, a resource used at runtime is referred to as an "actual resource" (AR), whereas a resource utilized at logic authoring time is referred to as a "virtual resource" (VR).*"

As further explained beginning at line 17 on page 13: "*The tool 150 (e.g., assuming that the tool is a logic authoring tool and thus has a logic authoring process) publishes an output to a*"

*translator 170. The publish phase causes the invocation of the translator 170, and the translator 170 also uses the virtual resources accessing API 135 to translate virtual resources to actual resources, so that they may actually be used at runtime.”*

Neither Funderbunk nor Loaiza is directed to a tool and method that provides a distinction between “virtual resources” versus “actual resources”, as these terms are used and defined in the present application.

Although definition of these terms in the claims themselves is not required, since the broadest reasonable interpretation during prosecution must be consistent with the specification, if the Examiner would like the current claims to be modified for such additional clarification to expedite prosecution, it is requested that the Examiner contact Applicants’ representative at the telephone number provided at the end of this response. As pointed out above, the Examiner’s attempt to read these two terms onto corresponding concepts of Funderbunk is contradictory with the meaning of the terms as defined in the specification and, therefore, improper.

As Applicants have argued previously, whether or not Funderbunk is used alone or in combination with Loaiza, there is a dependency between the Funderbunk database and the corresponding Funderbunk XML views. Specifically, from the Funderbunk abstract:

*“However, for the foreseeable future, a significant amount of business data will continue to be stored in relational database systems. Thus, a bridge is needed to satisfy the requirements of these new XML-based applications while still using relational database technology. This paper describes the design and implementation of the XTABLES middleware system, which we believe achieves this goal. In particular, XTABLES provides a general framework to create XML views of relational data, query XML views, and store and query XML documents using a relational database system.”*

More significant, the Examiner, by applying secondary reference Loaiza to primary reference Funderbunk, is attempting to change the XTABLES relationship between XML views and relational data to make them independent of each other. As such, the Examiner is completely undoing Funderbunk’s purpose which is “to create XML views of relational data.”

Such defeat of purpose of the primary reference is clear demonstration that the rejection

fails to establish a *prima facie* obviousness rejection, as held in *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984), described in MPEP § 2143.01: “*If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.*”

Therefore, Applicants submit that, from this above-recited guidance from *Gordon*, it would be improper to modify Funderbunk by Loaiza. More significantly, even if modified, neither of these two references address a mechanism directed to an “actual resource” (AR), meaning a resource used as runtime, versus a “virtual resource” (VR), meaning a resource utilized at logic authoring time, let alone provide the elements of even the independent claim.

Moreover, how one skilled in the art could possibly interpret Funderbunk, even if modified by Loaiza, as rendering obvious the present invention is beyond comprehension, particularly in view of the description from Loaiza’s abstract:

*“The present invention is directed to a method and mechanism for accessing recovery log information in a database system. The data stored in the recovery log is presented as a relational database “view”, which can be queried and accessed using relational database statements even though the underlying recovery log data may be stored in a non-relational format. According to an aspect of the invention, the recovery log data is thus encapsulated by the view presented to users of that data.”*

It is unclear to Applicants how one would take the recovery log of the “Relational Database of Daily Trades on the New York Stock Exchange” and make a virtual resource independent of the NYSE relational database. For example, presume that on Monday a new table is added to the relational database. Does an already existing virtual resource based on that relational database change? If so, then it’s dependent. If not, then why use the relational database at all to create a view of it?

Thus, particularly in view of the above-recited definition of terms from the specification, Applicants again point out that the terms “virtual resource” and “actual resource” of the claimed invention have no corresponding concepts in either Funderbunk or Loaiza.

Moreover, even if everything else in the rejection of record were to be accepted as

correctly characterized by the Examiner, the Examiner continues to simply ignore the important distinction that, in contrast to the claimed invention, Funderbunk views are dependent on relational data.

Independent claim 1 states: “ ... constructing at least one virtual resource independent of an actual resource ....” In an exemplary embodiment the XML meta-data describes actual resources (e.g., imagined or realized). The API is used to interrogate and manipulate the XML meta-data.

Thus, in the invention, logic authoring can proceed even if resources are not completely described, and even if an implementation does not yet exist. However, the implementation is preferably known at code generation/translation time (*e.g.*, see Figure 1). Conversely, direct referral to resources dictates that the actual resources must exist prior to logic authoring.

A Funderbunk XML view cannot be created independent of "existing relational data", and Funderbunk demonstrates the "Conversely" method acknowledged by the description in the specification.

Funderbunk clearly states: "One of the features provided by XTABLES is the ability to create XML views of existing relational data." This makes Funderbunk XML views dependent on the existence of existing relational data.

Hence, turning to the clear language of the claims, in Funderburk there is no teaching or suggestion of: “... constructing at least one virtual resource independent of an actual resource ....”, as required by independent claim 1. The remaining independent claims have similar language or contain similar concepts. Therefore, all claims are clearly allowable over Funderburk for this reason alone.

Applicant's previous comments concerning this rejection based on Funderburk remain valid but are not repeated herein.

Therefore, Applicants again submit that there clearly are elements of the claimed invention that are not taught or suggest by Funderburk et al., and the Examiner is respectfully requested to reconsider and withdraw this rejection.

Again, if the Examiner would like the claims to reflect a clarification based on the above

discussion rather than proceeding to Appeal, the Examiner is requested to contact Applicants' representative at the telephone number provided below.

### III. FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 1-37, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Assignee's Deposit Account No. 50-0510.

Respectfully Submitted,



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Frederick E. Cooperrider (Reg. No. 36,769)  
Direct Line: (703) 761-2377

**McGinn Intellectual Property Law  
Group, PLLC**  
8321 Old Courthouse Road, Suite 200  
Vienna, VA 22182-3817  
(703) 761-4100  
**Customer No. 48150**

### CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that I am filing this Amendment by EFS with the United States Patent and Trademark Office to Examiner Farhan M. Syed on February 2, 2009.



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Frederick E. Cooperrider, Reg. No. 36,769